

REMARKS

Claims 1, 2, 5-13, and 16-22 are pending in the present application.

The rejection of Claims 12-20 under 35 U.S.C. §102(b) over Yip is respectfully traversed.

In making this ground of rejection, the Office cites *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985). *In re Thorpe* is cited by the Office to support the premise that the product presented in Claims 12-20 are anticipated by the product disclosed in Yip (i.e., fresh fish eggs). However, in making this rejection it appears that the Examiner's reliance upon *In re Thorpe* is misplaced.

Specifically, the Examiner's attention is directed to the specific cited language from *In re Thorpe*, which provides: "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claims is unpatentable even though the prior product was made by a different process."

There are two important aspects to the foregoing. First, the products must be identical or an obvious variant thereof. Second, patentability of a product may not depend on its method of production, but the method of production cannot be disregarded if that method provides a distinct structure or product. Indeed, the Board and the Courts have said as much, which is set forth in MPEP §2113 in relevant part:

"The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where... the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product. See, e.g. *In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979)... The Board stated that the dispositive issue is whether the claimed factor

exhibits any unexpected properties compared with the factor disclosed by the prior art." (citing *Ex parte Gray*, 10 USPQ2d 1922 (Bd. Pat. App. & Inter. 1989)

The foregoing is particularly relevant to the present application. The method disclosed by Yip is distinct from the claimed method (Claim 1) and the resulting product is similarly distinct.

Yip fails to disclose or suggest the washing off step, as well as the neutralization of the remaining alkali solution after the alkali solution treatment. Failure to include either of these steps results in the remaining alkali denaturalizing the surface membrane of the eggs or milt causing deterioration in the freshness and quality of the eggs or milt. For example, the egg membrane produced by a method that fails to incorporate either the claimed washing or neutralization are highly susceptible to breakage causing the eggs and milt to crush or collapse.

Moreover, conventionally eggs that have been harvested from fish caught late in the season, the eggs would have to be either thrown away or used as fish food (see page 2, lines 18-25). However, by the method of the present invention, the eggs can be revived as a new egg product. Further, even for fresh eggs harvested from fish in season, the eggs can be maintained in a fresher state and the membrane can be strengthened. Thus, the life of the egg product can be extended (see Example 2). Moreover, in Example 1 and Comparative Example 1 Applicants have demonstrated the substantial differences in the egg products obtained from the present invention and that obtained by a method in which washing step is omitted, respectively

Accordingly, in view of the foregoing and the results set forth in the examples of the present specification, Applicants submit that the different methods of the present invention and Yip results in structural dissimilarities in the products obtained thereby that cannot be

disregarded. In view thereof, Applicants submit that the presently claimed invention is not anticipated by Yip.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 1, 2, and 5-11 under 35 U.S.C. §103(a) over Yip in view of Bender and Bedford is respectively .

The present invention provides a process for producing a fresh fish egg product or a milt product in which the fresh fish egg or milt is treated with an aqueous alkali solution and the aqueous alkali solution is washed off or neutralized, as well as a product obtained thereby (see Claims 1, 12, 21, and 22). Applicants submit that the combined disclosures of Yip, Bender, and Bedford cannot affect the patentability of the claimed invention for the following reasons.

In regard to Yip, Applicants note that this is deficient for at least two reasons. First, as recognized by the Examiner, Yip fails to disclose or suggest washing off or neutralizing the aqueous alkali solution on the treated at least one fish egg or milt. Second, Yip does not disclose or suggest treating fish roe with the alkali recited in Claim 1. At best, Yip provides alkali metal sulfites and citrates, which are not present in the claimed invention. Therefore, based on the disclosure of Yip, the skilled artisan would not have any expectation that treating fist roe with the alkali recited in Claim 1 provide enhanced commercial value to ovaries or eggs of salmon and the like caught at a later time (see page 4, lines 7-10).

Moreover, as stated above, Yip fails to disclose or suggest the washing off step, as well as the neutralization of the remaining alkali solution after the alkali solution treatment. Failure to include one of these steps results in the remaining alkali denaturalizing the surface membrane of the eggs or milt causing deterioration in the freshness and quality of the eggs or

milt. For example, the egg membrane produced by a method that fails to incorporate either the claimed washing or neutralization are highly susceptible to breakage causing the eggs and milt to crush or collapse.

Conventionally eggs that have been harvested from fish caught late in the season, the eggs would have to be either thrown away or used as fish food (see page 2, lines 18-25). However, by the method of the present invention, the eggs can be revived as a new egg product. Further, even for fresh eggs harvested from fish in season, the eggs can be maintained in a fresher state and the membrane can be strengthened. Thus, the life of the egg product can be extended (see Example 2). Moreover, in Example 1 and Comparative Example 1 Applicants have demonstrated the substantial differences in the egg products obtained from the present invention and that obtained by a method in which washing step is omitted, respectively

At least in an attempt to compensate for the first deficiency in the disclosure of Yip, the Examiner cites Bender. However, Bender fails to compensate for this deficiency since this reference merely relates to the treatment of fish, not to eggs or milt (i.e., internal organs). For example, Bender discloses that fish are treated after the fish are eviscerated (see column 3, lines 40-49; column 4, lines 4-6; and column 4, lines 65-68). The Examiner argues that Bender discloses washing fish “either whole, eviscerated, or filleted condition.” However, the Examiner is again reminded that the claims relate to washing fish eggs or milt, *not* fish flesh. At no point does Bender disclose or suggest that the internal organs are treated.

Further, Bender discloses that among the various phosphates, some specific orthophosphates are useful for retarding bacterial contamination on fish meat. However, Bender does not disclose or suggest the use of the specifically claimed alkali solution as presently claimed.

In addition, the invention of Bender resides in the finding that among the various phosphates some specific orthophosphate is useful for retarding bacteria contamination of fish flesh. Bender, however, neither discloses nor suggests that the specific alkali solutions of the present invention are useful for this purpose. Further, Bender fails to disclose or suggest the importance of the washing step or the neutralization step.

The Examiner cites Bedford for disclosing dry alkalis in the preservation of fish viscera. However, Bedford is plagued by the same problem as highlighted above for Yip. Namely, Bedford fails to disclose or suggest the washing off step, as well as the neutralization of the remaining alkali solution after the alkali solution treatment. Failure to include one of these steps results in the remaining alkali denaturalizing the surface membrane of the eggs or milt causing deterioration in the freshness and quality of the eggs or milt.

Finally, Applicants again remind the Examiner that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art *also suggests the desirability of the combination* (MPEP §2143.01). In this case, no such motivation can be found in Yip, Bender, or Bedford.

Moreover, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation... to modify the reference... Second, there must be a reasonable expectation of success. Finally, the prior art reference... must teach or suggest all the claim limitations." (MPEP §2142) For the reasons set forth above, the even if the artisan were to combine the disclosures of Yip, Bender, and Bedford the skilled artisan would have no reasonable expectation of the advantages flowing from the claimed invention (see Example 1 and Comparative Example 1). And, as noted above, the combined disclosures would still fail to disclose or suggest washing off or neutralizing the

aqueous alkali solution on the treated at least one fish egg or milt, as well as the specific identity of the alkali solution.

In view of the foregoing, Applicants request withdrawal of this ground of rejection.

Applicants submit that the present application is in condition for allowance. Early notification to this effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Vincent K. Shier, Ph.D.
Registration No. 50,552

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/03)